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ABSTRACT

A public affairs information acquisition model postulated 26 causal lines among the background variables parental status, educational attainment, income, social/political participation, five communication sources, and public affairs information status. Since this sequential model had 35 possible paths among the variables but hypothesized that only 26 paths were influential, it was proposed that the model would be found useful if the coefficients for the 26 predicted causal lines were found to be considerably greater than those coefficients for the lines without predictions. The model was tested in Barquisimeto, Venezuela, using a sample of 636 adults with varying socioeconomic and educational backgrounds; and the data fit the hypothesized informational status attainment model fairly well. The major differences between the predicted and actual models centered around the participation variable, which did not have significant coefficients for the causal lines leading to and emanating from it. Another difference was the relatively poor performance of magazine exposure as a predictor of information holding. Attention to radio and television public affairs programing had significant effects, suggesting that these media (especially radio) help narrow the knowledge gap between rich and poor in developing nations. (RL)

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How People Acquire Information: A Model of the Public Affairs Information Attainment Process

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Drawing from the pioneering analysis of Max Weber (1947), most authors in the social stratification literature generally discuss three "content dimensions" of stratification systems -- wealth, power, and prestige. Recently, however, several contemporary sociologists working in the area of stratification -- most notably Svalastoga (1965), Duncan (1968), and Haller (1976) -- have argued in favor of including "informational status" as a fourth, separate content dimension in stratification systems. The informational dimension is defined by Svalastoga as "the information, skill, or knowledge that the incumbent brings to the position essential for role performance." He operationalizes this concept as years of schooling completed by the individual. In most modern societies, he argues, the school system is the principal formal channel for the kind of information needed to move into an advantageous socioeconomic position.

However, education is expensive in both time and money so that those who are better off in the "wealth" dimension of stratification systems are better able to afford the intensive schooling necessary for upward mobility than their less wealthy counterparts. Therefore, if one considers only education in the process of attaining a given informational status, the net effect must then be an ever-widening gap between the rich and the poor in this status dimension (see Martin, McNelly, and Izcaray, 1975).

A relatively recent development in the history of social inequality is the growth of the mass media. With Ben Day's "penny press," thousands of New Yorkers had a chance to get information hitherto unavailable to all but a few inner circles. A more recent example, especially for developing nations, is the transistor radio, which is

capable of leaping geographical and education barriers with its information messages (McNelly, 1973).

Research findings on media use and on information and innovation diffusion suggest, however, that the media may not necessarily serve as the "great equalizers," distributing information to the disadvantaged groups that need it to improve their position in society. The mass media do offer more information to the poor than was available in pre-media days; however, the already well informed elites and sub-elites seem to be making more use of informational media than the poor. Therefore, while the absolute knowledge level of both seems to be increasing, there is some evidence that the gap between the two groups is actually becoming wider (Tichenor, Donohue and Olien, 1970; Tichenor, Rodenkirchen, Olien and Donohue, 1973; Donohue, Tichenor and Olien, 1975).

Taking Svalastoga, Duncan and Haller's viewpoint that information is an integral content ingredient in determining an individual's place in a social stratification system, one becomes all the more concerned with these large differences in information holding between individuals high and low in the wealth and prestige dimensions of the system. Thus the delineation of information which contributes to a person's socioeconomic status and the examination of the process whereby people attain a given informational status become increasingly important. This paper will look at one type of information which should be germane as a status index, public affairs information, and will analyze how individuals acquire public affairs information. It will examine the role played by traditional stratification variables such as parental background and respondent's education and income as well as the role the mass media and interpersonal communication play in distributing

information on public affairs. An hypothesized model of informational status attainment will be tested using data collected in Barquisimeto, Venezuela, under a joint venture between the Foundation for the Development of the West-Central Region (FUDECO) of Venezuela and the University of Wisconsin-Madison. The project was under the supervision of Fausto Izcaray of FUDECO and John T. McNelly of the University of Wisconsin.

THE MODEL

The path diagram in Figure 1 describes the assumptions and hypotheses guiding this study. Path analysis is a procedure which uses correlational data for analyzing causal systems (see Duncan, 1966, 1975; Land, 1969; Heise, 1969, for a detailed discussion of the statistical technique). The diagram in Figure 1 is actually a pictorial representation of a series of structural equations for the prediction of endogenous variables, all those variables to the right of an arrow.

This project postulates that parental socioeconomic status affects a person's educational attainment, that both parental status and educational attainment affect his income, that education and income affect his rate of participation in the social and political system. The model also hypothesizes that organizational participation, income, and education influence all the mass and interpersonal communication exposure variables and that each of these communication variables has a direct effect on public affairs informational status.

Before discussing the entire model and how all the variables interlock, let us examine the focal variable of informational status. An informational status should refer to those factual data stored by a respondent which can be used to maintain or improve his socioeconomic position. The concept goes beyond the mere formal education used by Svalastoga (1965) in first defining informational status.

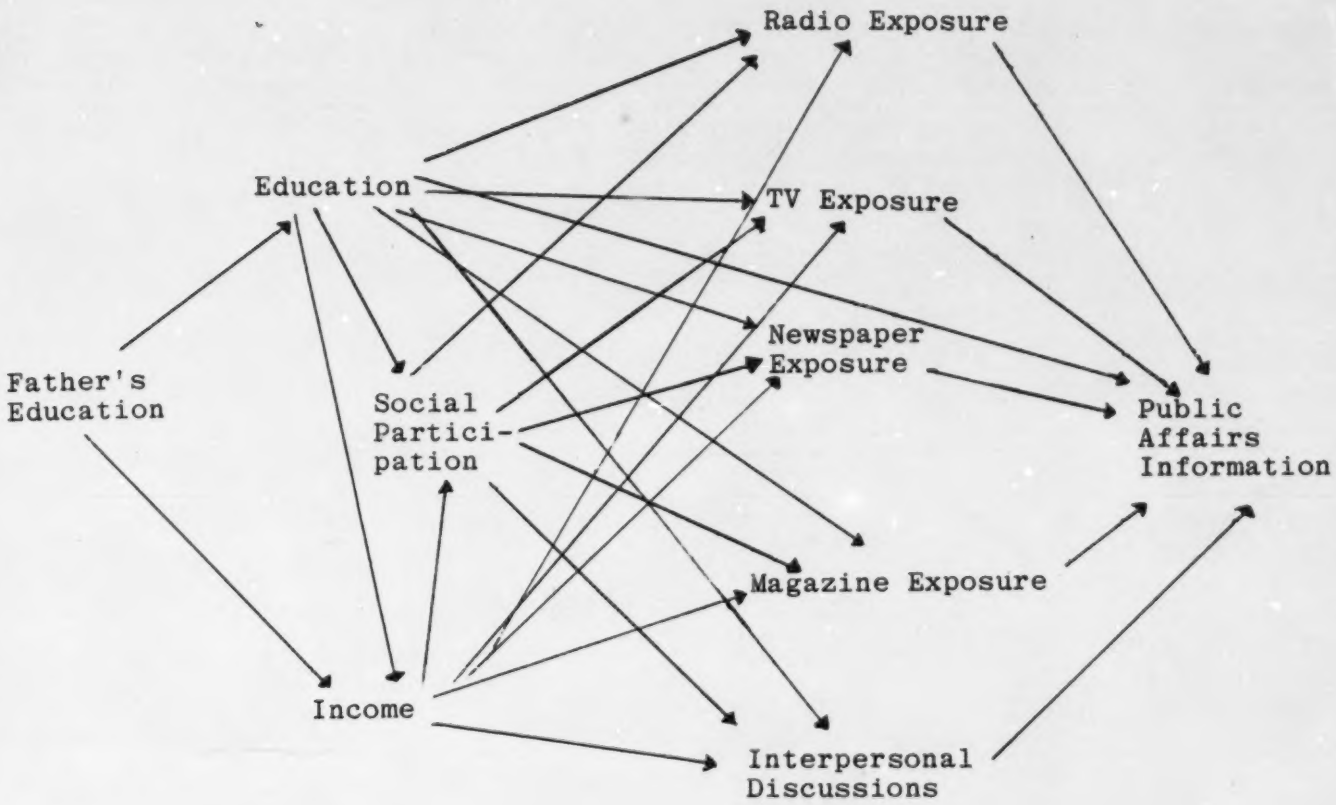

Figure 1

General Hypothesized Informational Status Attainment Model

Such data can be the result of a formal education but they can also be the result of job experience, interpersonal interactions and attention to the mass media. Education might serve as a surrogate measure for this stored knowledge but it really would be better to measure the knowledge directly and use formal education as a step along the way to attaining such information.

Informational status should not be confused with definitions used by those studying the mathematical theory of communication (Weaver, 1949; Rapoport, 1953) or information seeking (Atkin, 1972, 1973; Donohew and Tipton, 1973). Information here is not limited to new facts that an individual encounters. It refers to all data stored by an individual which can be used in status maintenance or advancement. Informational status will not, however, be expanded to include an interconnected body of facts as the word "knowledge" might connote. (The investigation would be stronger if it could measure such an integrated structure of information bits, but such an empirical feat seems formidable at this point.) Since the study will not encompass an entire interconnected information system possessed by an individual, it becomes important to decide just what types of information holding are useful in forming a content dimension of social stratification systems. Data stored by an individual to be used in maintaining or improving his socioeconomic position can include facts about nutrition, health, financial matters, governmental affairs and so forth. Even knowledge of sports or town gossip can be used to improve one's social position.

However, different types of information can be gained through different routes so that it would be impossible for a single study to investigate all the processes by which individuals acquire status-improving information. This study is interested in how attention to the mass media can improve informational status; therefore it will

focus on types of information the media emphasize. Of these, knowledge of financial matters and of public affairs seem to be two of the most useful types of information to possess vis-a-vis the other stratification content dimensions of wealth, power and prestige. Since knowledge of public affairs could provide a person with information to improve his financial condition (Governmental policy affects the money supply, taxation policies and indirectly the stock market.), information holding of public affairs-related facts seems a logical choice for an initial investigation of the informational status attainment process. In addition, public affairs information has been fairly widely studied as a dependent variable so that a considerable body of literature has built up upon which a theoretical framework for an informational status attainment model can be hung.

Now that the focal variable has been explicated to some extent, let us turn our attention to the hypothesized model for attaining an informational status. The causal order of the first three variables in the model corresponds well with their temporal order; furthermore, this ordering is identical to that proposed by Blau and Duncan (1967), Sewell, Haller and Portes (1969), Sewell, Haller and Ohlendorf (1971) in their models of educational and earnings attainment.

The theoretical basis for including these three variables in an informational status attainment model also seems strong. One of the focal points of concern to social stratification scholars has been the extent to which ascriptive factors at birth determine subsequent levels of achievement (Haller and Portes, 1973). Therefore, investigating the effect of a respondent's father's education on his own education and income and thus its indirect effect on his informational status is important for understanding how much of a respondent's informational status is "inherited" from his parents. Father's education

was measured by level of schooling (none, primary, secondary, higher) completed.

Respondent's education is one of the most important variables to be included in a model of informational status attainment. As noted earlier, Svalastoga (1965) would treat it as the main dependent variable. This study, however, follows Haller's (1970) suggestion that advanced education be considered as a common, but not indispensable, precondition for higher status along the other dimensions, and it places education fairly early in the process as one of the contributing variables to informational status. Education was measured by actual number of grades completed.

Reasons for including respondent's income in the model are not so compelling as those for examining effects of father's education and respondent's education on succeeding variables. However, income is an important prerequisite for affording products of the mass media. Earnings attainment models have shown that parental background and respondent's education do affect his income, and mass communications studies have shown that income in turn affects mass media exposure and therefore indirectly informational status (Allen, 1968; Block, 1970; Carter and Sepulveda, 1964; Dervin and Greenberg, 1972; McNelly and Deutschmann, 1963; McNelly and Molina, 1972).

The variables of education and income should have direct effects on mass media exposure since the higher one's education the more capable one should be of reading and understanding material and the higher one's income the more able one should be to afford informative materials. Yet these two variables should also have an effect over

and above the mere physical parameters just described. Education in particular should breed attitudes and habits that make an individual more inclined to seek information about the world around him. Some of the social psychological variables which might come into play as mediating factors between education and income on the one hand and media use on the other are the attitude that being informed about public affairs is important, interest in public affairs, the attitude that one should participate in the world of public affairs, the likelihood that one will actually participate in societal matters. A respondent who possesses these attitudes and habits is likely to think his informational status can better his life and therefore will try to improve it.

Of these variables, one's participation in the social system was selected to enter the model between education and income and mass media exposure. Participation was measured by the number of voluntary associations a respondent mentioned belonging to. It is placed at this point in the model because those studying voluntary association membership have found that the higher a person's socioeconomic background, the more likely he is to participate in community organizations and that this in turn leads him to seek more information about his environment through both mass and interpersonal sources (McGinn, 1971; Rees and Paisley, 1968).

This argument brings us to the variables of mass and interpersonal information sources. These variables are crucial to the hypothesized informational status attainment process. Certainly some types of knowledge are gained early in life through school and other socialization processes. However, most of the information items used in the Venezuela survey dealt with current events so that facts about them were probably acquired after a respondent's education had been completed,

his social participation habits established and his mass media or interpersonal discussion patterns fairly well set. In fact, it is hard to imagine how a person can gain knowledge of who heads a given political party in Venezuela other than through interpersonal conversations or attention to the mass media.[1]

Two sets of items were used to measure mass media exposure and comparisons were made between the two sets. One model was run using time spent listening to radio on a normal day, time spent watching television on a normal day, number of days per week respondent read a newspaper and number of magazines read regularly. This model was then compared with a model using measures of public affairs content exposure: frequency of attention to news and news features on radio and television and in newspapers and number of public affairs magazines read regularly. Frequency of public affairs discussions comprised the interpersonal communication variable for both models.

THE RESEARCH SETTING

Barquisimeto is a prosperous and fast-growing regional hub of Venezuela with a population of about 300,000. It is the modern and bustling capital of the state of Lara and serves as a commercial center for a large agricultural zone. The city is also a cultural center with three universities. Barquisimeto has a full complement of mass media, although it must import television by microwave relay directly from Caracas and thus has no local programming.

The range of socioeconomic status in Barquisimeto is very large. Neighborhoods vary from hillside slums with primitive dwellings to upper class urbanizaciones with elegant walled villas. The income distribution of the Barquisimeto sample is quite skewed with large numbers of respondents in the lower level and fewer in the upper levels of income brackets. In fact more than half the sample (63.2 percent) had

an income of 1500 Bolivares (U.S. $349) per month or less while only 13.4 percent had incomes of more than 3000 Bolivares (U.S. $698) per month.

Nearly half (49.8 percent) of the sample had only a primary education or less with 46 respondents (7.2 percent) reporting no schooling at all and 35 people saying they could not read at all. On the other end, 27.5 percent of the sample responded that they had completed secondary schooling or higher.

The Barquisimeto data were gathered as the second wave of a panel study started in 1973. The 1973 survey was based on a multi-stage area probability sample of 322 adults (18 years and older) of both sexes. The sample was stratified by four socioeconomic neighborhood classifications based on urban planning materials from the Ministry of Public Works. The 1974 sample was composed of 206 respondents from the 1973 study with whom it was possible to obtain new interviews plus an additional 430 adults interviewed according to a selection procedure for neighboring households, making a total sample of 636.

THE HYPOTHESES

Comparing between Measures

Most of the studies looking at the relationship between mass media exposure and knowledge of given events and personalities have used rather general measures of media exposure. They found that higher strata respondents were usually more exposed to newspapers and magazines and less exposed to radio and television while lower status individuals had opposite exposure patterns (see Dervin and Greenberg, 1972, for a summary of this literature). However, when Robinson (1972) looked at exposure to only public affairs content in each medium, he found a positive relationship between education and his exposure measures for each medium. He also found positive and significant relationships between all of his exposure variables and knowledge of

international affairs while many of the other studies found significant associations only with their print media exposure measures (Wade and Schramm, 1969; McNelly and Deutschmann, 1963).

For these reasons the following predictions were made:

(1) The direct paths to each medium will be positive when exposure only to news items is used.

(2) The direct paths to both print media will be positive when general "time spent" exposure measures are used.

(3) The direct paths to both electronic media will be negative when general "time spent" exposure measures are used.

(4) The explanatory power of the model will be higher when the more specific "news exposure" items are used.

Comparing between Socioeconomic Strata

In addition to comparing between measures, this study will also look at differences between socioeconomic strata within the Barquisimeto sample. A specific prediction here is that

(1) Interpersonal discussions will be more important in influencing political informational status for the high socioeconomic stratum than for the low.

This hypothesis is based on the reasoning that people generally discuss with people in the same status group. Since upper status individuals are usually more knowledgeable than lower status persons, knowledgeable individuals will be talking with other knowledgeable individuals in upper circles and less knowledgeable individuals will be talking with less knowledgeable individuals in lower circles. The end result should then be that the knowledgeable upper stratum gets more knowledgeable through interpersonal discussions while the lower stratum stays less knowledgeable.

Tichenor, Donohue and Olien (1970) list interpersonal contacts among higher socioeconomic status individuals as a contributing factor to the knowledge gap between upper and lower socioeconomic strata.

They suggest that education generally indicates a broader sphere of everyday activity, a greater number of reference groups, and more interpersonal contacts which increase the likelihood of discussing public affairs topics with others.

A second hypothesis about socioeconomic comparisons is as follows:

> (2) Education will be a more important variable for the lower status group than for the upper stratum.

Supadhiloke (1976) got mixed results in looking at the differential effects of education on population control knowledge across socioeconomic strata. He found that it was a much more important variable in influencing exposure to printed media and to television in the lower stratum than in the upper. Yet in examining the effect of formal education on poulation knowledge, he discovered that it exerted a stronger effect on such information holding within the high socioeconomic group than within the low socioeconomic stratum.

The present hypothesis is based on the assumption that there is a ceiling to the effect of education on media exposure and public affairs informational status. It seems reasonable to suggest that education influences media exposure and public affairs knowledge to the extent that it facilitates reading abilities and instills a desire to learn about current events. Post grade school education should yield diminishing returns as far as improving literacy and desire for public affairs information go. Therefore, it was reasoned that increases in education would be more important in influencing increases in media exposure and knowledge levels at the lower end of the spectrum.

A final hypothesis concerning differences between social strata is as follows:

(3) The mass media will have more effect on public affairs information for the lower status respondents than for the upper.

When looking at education, mass media use and information holding, Robinson (1972) found that the various media did not perform the same functions in all segments of the population. He discovered that heavy usage of any medium did little to raise information levels of college graduates who were well informed whether they used the media or not. The same generally held true, although not so strongly, for high school graduates. Among those in his sample who did not graduate from high school, however, there were pronounced increases in information level associated with regular media usage. McNelly and Molina (1972) also found that attention to the mass media affected knowledge levels more strongly among lower status individuals than among upper. Thus, both of these studies found instances in which the mass media could indeed narrow the knowledge gap between the upper and lower strata of society. They suggest that, to the extent that a less advantaged person pays attention to mass media, he can raise his informational status relatively more than can a better educated person through the same amount of attention.

THE RESULTS

Given the sequence laid out in Fig. 1, 35 paths are possible between all the variables in the study. As one can see by counting the lines drawn in the diagram, noteworthy effects for only 26 of these have been hypothesized. If the diagram in Fig. 1 represented a rigorous theoretical model, path coefficients would be calculated only for these 26 postulated causal connections. At this beginning stage of research into the informational status attainment process, however, it seems wiser to go the more conservative route of calculating all of the possible 35 path coefficients, using the calculated values as rough indicators of the influences operating in the system. If the theoretical reasoning depicted diagrammatically in Fig. 1 is a fair description of the reality to which it is addressed, the path

coefficients for the predicted causal lines should be considerably greater than those for the remainder where no causal predictions were made.

Table 1 gives zero-order correlations among all the variables examined in this study for the total Venezuela sample. Coefficients describing all 35 possible paths for the general media exposure measures in the total Venezuelan sample are presented in tabular form in Table 2. Inspection of this table reveals that some of the hypothesized paths are not significant, while other unhypothesized paths do have significant coefficients. Therefore, Fig. 2 is included as a diagrammatical representation of the paths which proved to be significant. One should note that path coefficients for Fig. 2 are not the same as those reported in Table 2 because new coefficients were computed using only those paths which turned out to be significant in the first set of calculations for all possible paths.

Before getting into the concrete discussion of the results presented in the path models, let us discuss some of the statistical limitations of standardized and unstandardized path coefficients which will make this description of results somewhat complicated. The presentation of results of the entire population will be given in terms of standardized coefficients. Standardized coefficients are fairly easy to interpret since understanding their meaning does not depend on knowing the scales of each of the variables. This quality is especially important when variables are composed of indices of items where one unit of the index does not have any intrinsic meaning. Also, standardized coefficients allow one to compare the relative influence of one variable with that of another variable <u>within the same model</u>.

However, standardized coefficients are weighted by the standard deviations of all the variables in a given sample and hence cannot be used in comparing <u>between samples</u>. This limitation holds even for

Table 1

Zero-Order Correlations Among All Variables for Total Sample

Variable	Variable												
	FE	ED	IN	PA	TVG	RG	NPG	MGG	TVS	RS	NPS	MGS	DI
ED	.385												
IN	.326	.607											
PA	.069	.139	.125										
TVG	.054	.058	.010	.059									
RG	-.094	-.219	-.263	.021	-.107								
NPG	.196	.492	.376	.107	.080	-.122							
MGG	.276	.419	.333	.080	.191	.003	.365						
TVS	.189	.384	.368	.100	.391	-.166	.376	.230					
RS	.012	.071	.118	.059	.041	.157	.173	.083	.392				
NPS	.266	.584	.462	.119	.115	-.179	.590	.442	.555	.343			
MGS	-.004	.124	.027	-.067	-.021	.008	.124	.165	.078	-.024	.095		
DI	.197	.408	.309	.131	.057	-.081	.340	.245	.309	.202	.437	.056	
PAI	.261	.605	.558	.200	.009	-.213	.478	.332	.448	.264	.559	.061	.389

NOTE: Item identifications are: FE - father's educational attainment; ED - respondent's own educational attainment; IN - monthly income of respondent's family; PA - organizational participation (measured as number of organizations respondent belongs to); RG - time spent on a normal day listening to radio; TVG - time spent on a normal day watching TV; NPG - number of days per week on which newspaper is read; MGG - total number of magazines read regularly; TVS - frequency of watching news and programs about government and political matters on TV; RS - frequency of listening to news and discussions of public events, politics or government on radio; NPS - frequency of reading stories on politics or government problems, economics or other countries in a newspaper; MGS - total number of public affairs magazines read regularly; DI - frequency of political discussions with family, co-workers and friends; PAI - public affairs information.

Table 2

Effects of Socioeconomic Background, Social Participation and General Content Communications Exposure On Public Affairs Information Holding of Total Barquisimeto Sample

Dependent Variable		Predetermined Variables									R^2
		FE	ED	IN	PA	RG	TVG	NPG	MGG	DI	
ED	Unstandardized	(1.653)*									.148
	Standardized	(.385)									
IN	Unstandardized	(.460)*	(.559)*								.378
	Standardized	(.108)	(.565)								
PA	Unstandardized	.011	(.022)	(.014)							.022
	Standardized	.012	(.097)	(.062)							
RG	Unstandardized	.032	(-.074)*	(-.155)*	(.196)						.079
	Standardized	.010	(-.102)	(-.212)	(.061)						
TVG	Unstandardized	.139	(.049)	(-.038)	(.183)						.009
	Standardized	.042	(.063)	(-.048)	(.053)						
NPG	Unstandardized	-.017	(.253)*	(.075)*	(.092)						.253
	Standardized	-.007	(.417)	(.122)	(.034)						
MGG	Unstandardized	.167*	(.096)*	(.033)*	(.022)						.198
	Standardized	.124	(.305)	(.105)	(.016)						
DI	Unstandardized	.116	(.247)*	(.067)	(.238)						.178
	Standardized	.036	(.330)	(.088)	(.071)						
PAI	Unstandardized	-.015	(.141)*	(.124)*	.213*	(-.035)	(-.022)	(.147)*	(.059)	(.074)*	.481
	Standardized	-.007	(.285)	(.248)	.096	(-.050)	(-.034)	(.180)	(.038)	(.112)	

NOTE: Item identifications are: FE- father's educational attainment; ED- respondent's own educational attainment, IN- monthly income of respondent's family; PA- social participation (Number of organizations belonged to), RG- time spent on a normal day listening to radio; TVG- time spent on a normal day watching TV; NPG- number of days per week newspaper is read; MGG- total number of magazines read regularly; DI- frequency of political discussions with family, co-workers and friends; PAI- public affairs information.
* $p < .05$
Figures in parentheses are coefficients for paths hypothesized in Fig. 1.

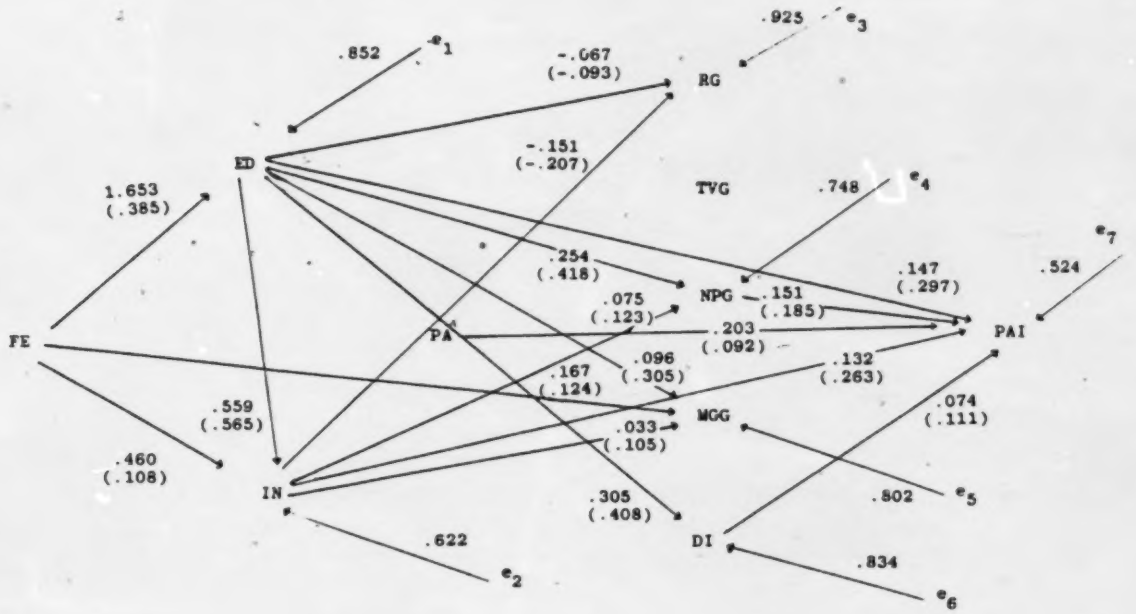

Figure 2

A path model of socioeconomic background, social participation and general-content communications exposure on public affairs information holding of total Barquisimeto sample

Item identifications are: FE- father's educational attainment; ED- respondent's own educational attainment; IN- monthly income of respondent's family; PA- social participation (measured as number of organizations belonged to); RG- time spent on a normal day listening to radio; TVG- time spent on a normal day watching TV; NPG- number of days per week on which newspaper is read; MGG- total number of magazines read regularly; DI- frequency of political discussions with family, co-workers and friends; PAI- public affairs information.
Numerical entries are regression coefficients: those in parentheses are standardized; those not in parentheses are unstandardized. All path coefficients shown are statistically significant at the .05 level.

comparing two parts taken from the same sample. For example, comparisons using standardized coefficients could not validly be made between paths from a model using upper socioeconomic strata respondents and paths from a model using lower socioeconomic strata respondents. Even though these subsamples were selected by partitioning a single sample and the variables in them were measured by the same instrument, the standard deviations of these variables will vary from subsample to subsample and thus their standardized coefficients are not comparable (see Schoenberg, 1972). Therefore unstandardized betas must be used in comparing upper and lower socioeconomic strata with each other and with the total Venezuela sample.

It may seem unnecessarily complicated to switch back and forth between standardized and unstandardized coefficients; however, unstandardized coefficients have some interpretive drawbacks which argue for their use only when necessary as in comparing models. (1) Unstandardized coefficients are tied to the scale of each individual variable, so they do not allow one to compare the relative strengths of variables within one model. One cannot say that because one unstandardized coefficient is twice as big as another the influence of one variable is twice as strong as the other. (2) Unstandardized coefficients can be used only to discuss direct effects of variables; indirect effects cannot be given in unstandardized coefficients. (3) Finally, unstandardized coefficients are extremely difficult to interpret when a variable is composed of an index of items. Therefore, where possible, single items were used as variable measures to aid in interpretation.

Since the first part of this presentation of results revolves

around a single model, not comparisons of two models, descriptions will be given using standardized coefficients in discussing the total sample models. These standardized coefficients indicate the amount of variation, expressed as the proportion of a standard unit, that is produced in the dependent variable by a standard unit of change in the independent variable. Looking at the standardized coefficients presented in Fig. 2, one can see that father's education has significant direct effects on respondent's own education (.385) and on respondent's income (.108). Father's education also has an indirect effect of .218 on income via own education (obtained by multiplying the standardized path coefficient from FE to ED, .385, by the coefficient from ED to IN, .565); therefore its total impact on income is .326 (computed by summing direct and indirect effects).

Through its impact on these important variables of own education and income, father's education is able indirectly to influence exposure to various communications media and public affairs informational status. It reaches public affairs informational status through a number of circuitous routes: through education to public affairs information (.114), through income to public affairs information (.028), through education to income to public affairs information (.057), through education to income to newspaper exposure to public affairs information (.005), through income to newspaper exposure to public affairs information (.002), through education to public affairs discussion to public affairs information (.017). Although each of these individual indirect effects is quite small, their total impact sums to .253. This number indicates that the total effect of father's education, a variable determined before the individual is even born, on the individual's public affairs informational status is larger than the direct effects of any of the communication variables.

Respondent's own education and income, as had been anticipated, emerge as the key variables in the public affairs informational status attainment process for the total sample. Both of these variables have significant direct effects of .297 and .263 respectively on the focal variable of public affairs information and both reach public affairs information indirectly through exposure to newspapers. Education also influences public affairs information indirectly through interpersonal discussion, through income and through income and newspaper exposure. Summing the direct and indirect effects of education on public affairs information shows that education has a total impact of .581 on the focal variable.

Income has a total effect of .286 on public affairs information; most of that influence is direct (.263) with a small indirect impact through newspaper exposure (.023). None of the three status variables leads to participation in voluntary organizations as had been hypothesized, but participation itself does have a small, though statistically significant, impact of .092 on public affairs informational status. Participation in the total Barquisimeto sample does not figure into the status attainment process nearly so importantly as had been expected.

The only general communication variables which significantly influence public affairs information are exposure to newspapers (.185) and frequency of public affairs discussions (.111). The fact that exposure to radio or to television in general does not have a significant impact on public affairs information is not really surprising. It had been hypothesized that they would have a negative influence and, in fact, Table 2 shows that they do have negative, though insignificant, effects on public affairs information. However, the fact that number of magazines read does not affect public affairs information

significantly is rather surprising in view of the evidence from the United States (Wade and Schramm, 1969; Robinson, 1972) that magazine reading is a potent influence on public affairs information.

Comparing Media Exposure Measures

Several studies have stopped with exposure to various communications media as their final dependent variables. With these studies in mind, hypotheses were formulated predicting the effects income, education and participation would have on these communications variables. Participation in the total Barquisimeto sample has no significant influence on these variables. However, the predicted relationships between education and income on the one hand and newspaper reading, magazine reading and radio listening on the other do hold up; the socioeconomic variables have significant positive effects on newspaper and magazine reading and significant negative effects on radio listening. Exposure to television is not significantly related to any other variable in the model; income does have a weak negative effect on general television viewing, and education a weak positive effect, but neither of these is statistically significant.

When public affairs-content exposure measures were substituted for the general-content measures, the hypothesized relationships between these specific measures and education and income generally occurred. In the specific model (see Table 3) both paths from education and income to radio public affairs listening are positive, though only income has a statistically significant influence on radio public affairs listening. Also, the path leading from exposure to public affairs radio content to public affairs information is positive and significant. In this specific public affairs exposure model, all paths leading to and from exposure to public affairs on television are positive, and all but the paths between education and public affairs television viewing are

Table 3

Effects of Socioeconomic Background, Social Participation and Public Affairs Communications Exposure On Public Affairs Information Holding of Total Barquisimeto Sample

Dependent Variable		Predetermined Variables FE	ED	IN	PA	RS	TVS	NPS	MGS	DI	R^2
ED	Unstandardized	(1.653)*									.148
	Standardized	(.385)*									
IN	Unstandardized	(460)*	(.559)*								.378
	Standardized	(.108)	(.565)*								
PA	Unstandardized	.011	(.022)	(.014)							.022
	Standardized	.012	(.097)	(.062)							
RS	Unstandardized	-.081	(.002)	(.072)*	(120)						.017
	Standardized	-.032	(.004)	(.120)*	(.046)						
TVS	Unstandardized	.069	(.158)	(.136)*	(110)						.178
	Standardized	.025	(.243)*	(.208)*	(.038)						
NPS	Unstandardized	.116	(.426)	(.151)*	(125)						.361
	Standardized	.030	(.469)*	(.164)*	(.031)						
MGS	Unstandardized	-.012	(.011)	(-.004)	(-.021)						.028
	Standardized	-.052	(.193)*	(-.063)	(-.083)*						
DI	Unstandardized	.116	(.247)	(.067)	(238)						.178
	Standardized	.036	(.330)*	(.088)	(.071)						
PAI	Unstandardized	-.015	(.146)	.116	.194	(.090)	(.072)	(.083)	(.013)	(.046)	.506
	Standardized	-.007	(.294)*	.232*	.088*	(.107)*	(.094)*	(.152)*	(.002)	(.070)*	

NOTE: Item identifications are: FE- father's educational attainment; Ed- respondent's own educational attainment; IN- monthly income of respondent's family; PA- social participation (number of organizations belonged to); RS- frequency of listening to news and discussions of public events, politics or government on radio; TVS- frequency of watching news and programs about government and political matters on TV; NPS- frequency of reading stories on politics or government problems, economics or other countries in newspaper; MGS- total number of public affairs magazines read regularly; DI- frequency of political discussions with family co-workers and friends; PAI- public affairs information.

* $p < .05$.

Figures in parentheses are coefficients for paths hypothesized in Fig. 1.

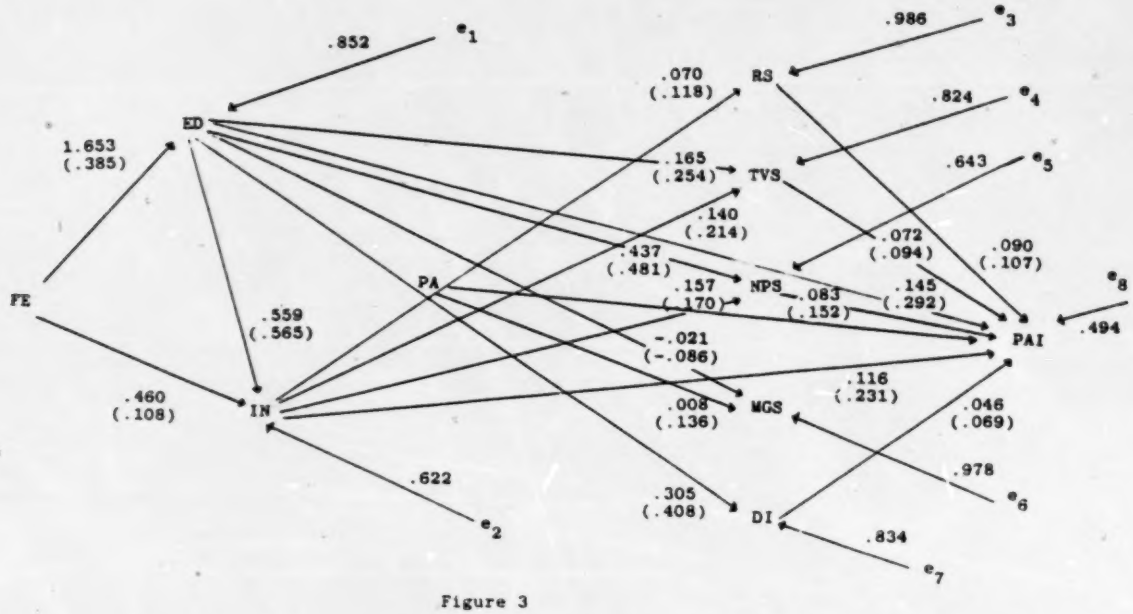

Figure 3

A path model of socioeconomic background, social participation and public affairs-content communications exposure on public affairs information holding of total Barquisimeto sample

Item identifications are: FE- father's educational attainment; ED- respondent's own educational attainment; IN- monthly income of respondent's family; PA- social participation (measured as number of organizations belonged to); RS- frequency of listening to news and discussions of public events, politics or government on radio; TVS- frequency of watching news and programs about government and political matters on TV; NPS- frequency of reading stories on politics or government problems, economics or other countries in newspaper; MGS- total number of public affairs magazines read; DI- frequency of political discussions with family, co-workers and friends; PAI- public affairs information.

Numerical entries are regression coefficients: those in parentheses are standardized; those not in parentheses are unstandardized. All path coefficients shown are statistically significant at the .05 level.

statistically significant. The paths leading to and from public affairs newspaper reading are positive and significant, but the public affairs magazine reading is influenced negatively by education and not influenced significantly by income.

The final prediction about the differences in measures of media use was that the model using specific exposure to public affairs content in the media would account for more of the variance in public affairs information than the model using exposure to general media content. This hypothesis is supported by results from the total Barquisimeto sample. The model using general media exposure accounted for 47.6 percent of the variance in public affairs information whereas the public affairs exposure model accounted for 50.6 percent of the variance.

Comparing Socioeconomic Strata

Now the discussion will move from how well the informational status models fit the data for Barquisimeto as a whole to how the informational status attainment process may differ from the upper strata of society to the lower. Since this analysis involves the comparison of models from separate populations with different standard deviations for their variables, descriptions will use unstandardized coefficients. Also, models using exposure only to public affairs media offerings are used. Tables 4 and 5 give zero-order correlations among all variables for the two subsamples. Tables 6 and 7 show how the high socioeconomic and low socioeconomic samples compare when all 35 possible paths of the model are run. Figs. 4 and 5 are pictorial representations of the model when only the significant paths from Tables 6 and 7 were run through the analysis.

The first predicted difference between the two samples was that interpersonal political discussions would be more important in influencing

Table 4

Zero-Order Correlations Among All Variables for High Socioeconomic Stratum

Variable	FE	ED	IN	PA	TVG	RG	NPG	MGG	TVS	RS	NPS	MGS	DI
ED	.187												
IN	.166	.382											
PA	-.049	.169	.109										
TVG	.090	-.139	-.016	.007									
RG	-.006	-.249	-.207	-.060	.218								
NPG	.017	.128	.180	.093	-.066	-.072							
MGG	.141	.097	.196	-.013	.071	.004	.110						
TVS	-.004	.091	.150	.065	.231	-.154	.195	.040					
RS	-.068	-.051	.047	.011	.017	.216	.158	.024	.405				
NPS	.088	.300	.277	.058	-.029	-.163	.394	.238	.403	.276			
MGS	-.010	.079	-.007	-.030	-.101	-.052	.065	-.104	.046	-.076	.007		
DI	.132	.353	.142	.071	-.022	-.059	.241	.080	.257	.157	.355	.127	
PAI	.088	.358	.385	.266	-.035	-.170	.321	.157	.427	.248	.388	.014	.273

NOTE: Item identifications are: FE- father's educational attainment; ED- respondent's own educational attainment; IN- monthly income of respondent's family; PA- organizational participation (measured as number of organizations respondent belongs to); RG- time spent on a normal day listening to radio; TVG- time spent on a normal day watching TV; NPG- number of days per week on which newspaper is read; MGG- total number of magazines read regularly; RS- frequency of listening to news and discussions of public events, politics or government on radio; TVS- frequency of watching news and programs about government and political matters on TV; NPS- frequency of reading stories on politics or government problems, economics or other countries in a newspaper; MGS- total number of public affairs magazines read regularly; DI- frequency of political discussions with family, co-workers and friends; PAI- public affairs information.

Table 5

Zero-Order Correlations Among All Variables for Low Socioeconomic Stratum

	Variable												
Variable	FE	ED	IN	PA	TVG	RG	NPG	MGG	TVS	RS	NPS	MGS	DI
ED	.272												
IN	.089	.151											
PA	.129	.040	.074										
TVG	.069	.223	.131	.088									
RG	.014	.078	-.017	.114	.167								
NPG	.097	.431	.197	.063	.145	.016							
MGG	.253	.457	.208	.091	.279	.155	.347						
TVS	.106	.217	.166	.062	.536	-.009	.265	.159					
RS	-.004	.006	.034	.075	.060	.198	.122	.057	.354				
NPS	.166	.497	.235	.094	.208	-.006	.529	.417	.470	.361			
MGS	-.010	.187	-.002	-.102	.026	.066	.156	.207	.088	.016	.146		
DI	.081	.211	.152	.140	.109	.042	.258	.224	.164	.178	.339	.059	
PAI	.107	.440	.217	.098	.052	-.017	.360	.245	.201	.216	.442	.091	.275

NOTE: Item identifications are: FE- father's educational attainment; ED- respondent's own educational attainment; IN- monthly income of respondent's family; PA- organizational participation (measured as number of organizations respondent belongs to); RG- time spent on a normal day listening to radio; TVG- time spent on a normal day watching TV; NPG- number of days per week on which newspaper is read; MGG- total number of magazines read regularly; RS- frequency of listening to news and discussions of public events, politics or government on radio; TVS- frequency of watching news and programs about government and political matters on TV; NPS- frequency of reading stories on politics or government problems, economics or other countries in a newspaper; MGS- total number of public affairs magazines read regularly; DI- frequency of political discussions with family, co-workers and friends; PAI- public affairs information.

Table 6

Effects of Socioeconomic Background, Social Participation and Public Affairs Communications Exposure On Public Affairs Information Holding of Barquisimeto High Socioeconomic Stratum

Dependent Variable		Predetermined Variables									
		FE	ED	IN	PA	RS	TVS	NPS	MGS	DI	R^2
ED	Unstandardized	(.722)*									
	Standardized	(.187)									.035
IN	Unstandardized	(.464)	(.443)*								
	Standardized	(.099)	(.363)								.155
PA	Unstandardized	-.091	(.043)*	(.013)							
	Standardized	-.090	(.162)	(.062)							.039
RS	Unstandardized	-.203	(-.057)	(.054)	(.032)						
	Standardized	-.068	(-.073)	(.085)	(.011)						.012
TVS	Unstandardized	-.083	(.025)	(.076)*	(.109)						
	Standardized	-.031	(.037)	(.136)	(.042)						.027
NPS	Unstandardized	.051	(.198)*	(.137)*	(-.001)						
	Standardized	.015	(.225)	(.189)	(-.000)						.121
MGS	Unstandardized	-.007	(.008)	(-.002)	(-.012)						
	Standardized	-.026	(.106)	(-.038)	(-.045)						.010
DI	Unstandardized	.243	(.305)*	(.000)	(.060)						
	Standardized	.069	(.337)	(.000)	(.018)						.129
PAI	Unstandardized	.044	(.094)*	.095*	.385*	(.069)	(.216)*	(.070)	(.009)	(.024)	
	Standardized	.021	(.173)	.213	.186	(.099)	(.271)	(.114)	(.001)	(.040)	.391

NOTE: Item identifications are: FE- father's educationcl attainment; ED- respondent's own educational attainment; IN- monthly income of respondent's family; PA- social participation (number of organizations belonged to); RS- frequency of listening to news and discussions of public events, politics or government on radio; TVS- frequency of watching news and programs about government and political matters on TV; NPS- frequency of reading stories on politics or government problems, economics or other countries in newspaper; MGS- total number of public affairs magazines read regularly; DI- frequency of political discussions with family, co-workers and friends; PAI- public affairs information.

* $p < .05$.

Figures in parentheses are coefficients for paths hypothesized in Fig. 1.

Table 7

Effects of Socioeconomic Background, Social Participation and Public Affairs Communications Exposure On Public Affairs Information Holding of Barquisimeto Low Socioeconomic Stratum

Dependent Variable		Predetermined Variables									
		FE	ED	IN	PA	RS	TVS	NPS	MGS	DI	R^2
ED	Unstandardized	(.888)*									
	Standardized	(.272)									.074
IN	Unstandardized	(.077)	(.062)*								
	Standardized	(.052)	(.137)								.025
PA	Unstandardized	.132*	(-.001)	(.045)							
	Standardized	.125	(-.004)	(.064)							.021
RS	Unstandardized	-.041	(.002)	(.050)	(.176)						
	Standardized	-.017	(.003)	(.030)	(.075)						.007
TVS	Unstandardized	.108	(.161)*	(.250)*	(.108)						
	Standardized	.038	(.186)	(.131)	(.040)						.069
NPS	Unstandardized	.066	(.564)*	(.420)*	(.228)						
	Standardized	.017	(.467)	(.158)	(.061)						.278
MGS	Unstandardized	-.013	(.016)*	(-.004)	(-.024)*						
	Standardized	-.051	(.208)	(-.021)	(-.102)						.050
DI	Unstandardized	.011	(.183)*	(.243)*	(.370)*						
	Standardized	.004	(.188)	(.114)	(.124)						.075
PAI	Unstandardized	-.054	(.176)*	.132*	.071	(.096)*	(-.027)	(.088)*	(.016)	(.059)*	
	Standardized	-.030	(.319)	.109	.042	(.133)	(-.042)	(.194)	(.002)	(.105)	.300

NOTE: Item identifications are: FE- father's educational attainment; ED- respondent's own educational attainment; IN- monthly income of respondent's family; PA- social participation (number of organizations belonged to); RS- frequency of listening to news and discussions of public events, politics or government on radio; TVS- frequency of watching news and programs about government and political matters on TV; NPS- frequency of reading stories on politics or government problems, economics or other countries in newspaper; MGS- total number of public affairs magazines read regularly; DI- frequency of political discussions with family, co-workers and friends; PAI- public affairs information.

* $p < .05$.

Figures in parentheses are coefficients for paths hypothesized in Fig. 1.

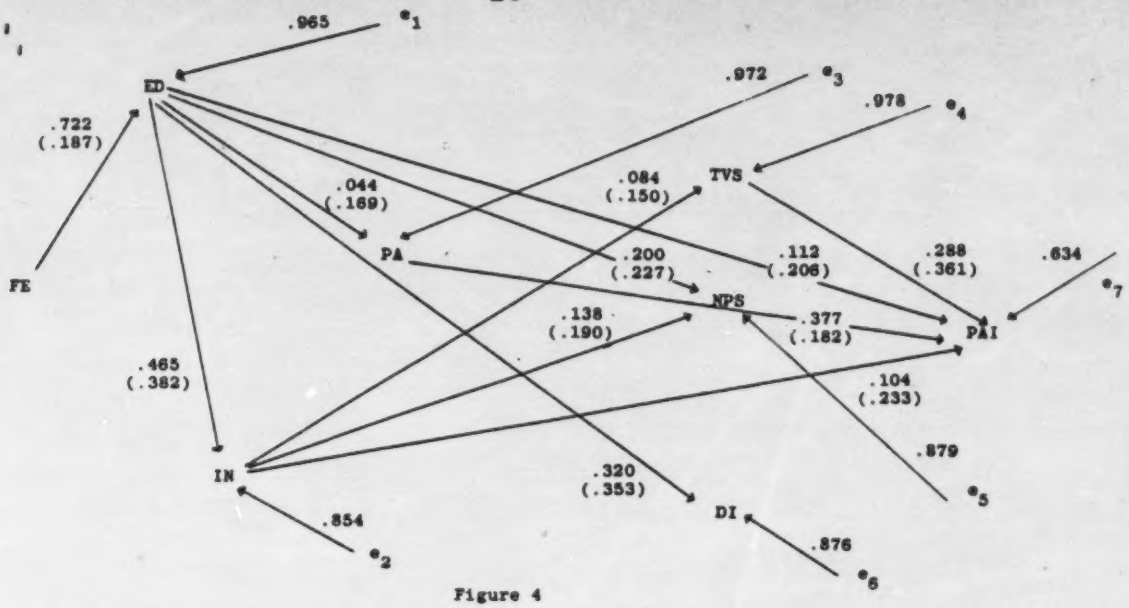

Figure 4

A path model of socioeconomic background, social participation and public affairs-content communications exposure on public affairs information holding of high socioeconomic stratum

Item identifications are: FE-father's educational attainment; ED- respondent's own educational attainment; IN- monthly income of respondent's family; PA- social participation (measured as number of organizations belonged to); RS- frequency of listening to news and discussions of public events, politics or government on radio; TVS- frequency of watching news and programs about government and political matters on TV; NPS- frequency of reading stories on politics or government problems, economics or other countries in newspaper; MGS- total number of public affairs magazines read regularly; DI- frequency of political discussions with family, co-workers and friends; PAI- public affairs information.

Numerical entries are regression coefficients: those in parentheses are standardized; those not in parentheses are unstandardized. All path coefficients shown are statistically significant at the .05 level.

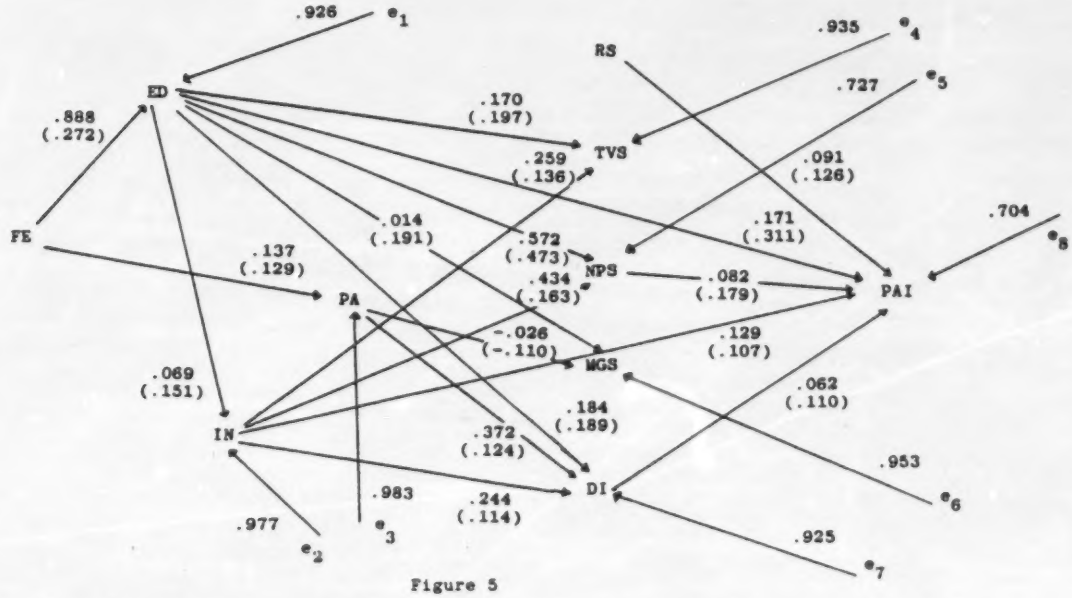

Figure 5

A path model of socioeconomic background, social participation and public affairs-content communications exposure on public affairs information holding of low socioeconomic stratum

Item identifications are: FE- father's educational attainment; ED- respondent's own educational attainment; IN- monthly income of respondent's family; PA- social participation (measured as number of organizations belonged to); RS- frequency of listening to news and discussions of public events, politics or government on radio; TVS- frequency of watching news and programs about government and political matters on TV; NPS- frequency of reading stories on politics or government problems, economics or other countries in newspaper; MGS- total number of public affairs magazines read regularly; DI- frequency of political discussions with family, co-workers and friends; PAI- public affairs information.

Numerical entries are regression coefficients: those in parentheses are standardized; those not in parentheses are unstandardized. All path coefficients shown are statistically significant at the .05 level.

public affairs information for the high stratum than for the low. The data do not support this hypothesis at all. In fact just the opposite appears to be true. Political discussion does not have a statistically significant impact on public affairs information in the upper stratum but does in the lower. In the lower stratum, for every point rise in a respondent's frequency of public affairs discussions with friends, co-workers and family, there is a corresponding rise of .062 points in his or her public affairs information score.

The second hypothesis was that the effect of education on public affairs information would be greater for the lower stratum than for the higher. The data support this hypothesis. Every extra year of education directly raises a lower stratum respondent's public affairs informational status by .171 points versus only a .112-point direct increase in public affairs information for every additional year of education for an upper status respondent. Though the indirect routes by which education influenced public affairs information for each stratum cannot be directly compared (see Schoenberg, 1972), education reaches public affairs information in the lower stratum via newspaper reading and political discussions. The only indirect path from education to public affairs information in the higher stratum is through participation.

The third hypothesis about differences between strata predicted that the mass media would have more effect on public affairs information for lower status respondents than for the upper. Results are somewhat mixed for this hypothesis. Newspaper and radio public affairs exposure significantly influence public affairs information for lower status respondents but not for upper. However, public affairs television viewing has a significant effect on public affairs information in the upper stratum but not in the lower stratum. Reading public affairs magazines has no significant influence on public affairs

information in either sample.

There is one rather interesting difference in the informational status attainment process between the two strata which was not hypothesized. Participation shows up as a more integral part of the process in the higher stratum model. For respondents in that stratum, it acts as the only significant mediating variable between education and public affairs information. In the lower stratum father's education is the only variable which leads to participation, but participation does in turn have a significant impact on discussion of public affairs and indirectly through that variable reaches public affairs information in the lower stratum.

DISCUSSION AND CONCLUSIONS

The Barquisimeto data fit the hypothesized informational status attainment model fairly well. The major differences between the predicted model and the actual model centered around the variable of participation. In the total sample none of the background variables had significant paths leading to participation and it in turn did not affect any of the communications variables, not even interpersonal public affairs discussions. Participation fared a little better in the high and low subsamples, emerging as a fairly important variable in the high socioeconomic stratum.

Another difference in the predicted and actual models is the relatively poor performance of magazine exposure as a predictor of information holding. Not many people in the sample read more than one magazine (see Appendix for means and standard deviations of all variables), and this small readership could account for the smaller impact of magazine reading on information holding than was expected.

As might be expected, changing the general exposure media variables

to public affairs exposure measures made a greater difference in the effects of attention to broadcast media than attention to print media. The fact that attention to radio and to television public affairs programming had significant effects on informational status suggests that these media can impart information which can help individuals in maintaining or improving their positions in society. The influence of radio in particular should be encouraging to those seeking to narrow the knowledge gap between the rich and the poor in developing nations. Since radio receivers are relatively cheap, require no reading ability for understanding, and reach many lower status people already, radio should certainly be considered as an important disseminator of information.

Several other findings of this study suggest possibilities for knowledge gap narrowing. Tichenor et al. (1970) listed interpersonal contacts among higher socioeconomic status individuals as a contributing factor to the knowledge gap between upper and lower strata. Yet data from this analysis suggest that individuals in the lower stratum of the Barquisimeto sample who discuss politics gain relatively more public affairs information than do individuals in the upper stratum. The same trend holds for newspaper and radio public affairs exposure and for education. Increased education and increased attention to newspaper and radio public affairs content yield greater information gains for members of the lower strata than those of the upper. Of course the problem is that upper status individuals on the average have more education, engage in more public affairs discussions, and pay more attention to public affairs content in the mass media. Yet findings from this study do suggest that the knowledge gap between the rich and the poor need not inevitably be ever widening and those poor

who do seek public affairs information from mass and interpersonal sources need not be caught up in a "vicious cycle" of ignorance.

NOTES

1. The following items composed the index used to measure public affairs information:

Do you know what the highest judicial body in the country is?

FUDECO is a regional organization. Can you tell me which of the two following activities describes the work of FUDECO? 1. Financing regional projects (incorrect) or 2. studies to guide and coordinate development of the region (correct)

The executive branch is one of three branches of the government. Please tell me what the other two branches are.

Do you remember who the president of the Lara state legislature is?

Can you tell me what post in the present government Dr. Hector Hurtado occupies?

Do you know what post is occupied by Hernan Rodriguez Araujo?

Can you tell me what body Dr. Luis A. Pietri presides over?

What organization is responsible for garbage collection in Barquisimeto?

APPENDIX

Means and Standard Deviations for All Variables in the Total Barquisimeto Sample and in Both Subsamples

Variable	Total Sample		High Socioeconomic Stratum		Low Socioeconomic Stratum	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
FE	2.49	1.01	2.95	.92	2.07	.94
ED	7.38	4.33	10.73	3.56	4.97	3.05
IN	5.32	4.29	8.91	4.34	2.57	1.39
PA	1.19	.97	1.31	.94	1.11	.99
TVG	4.60	.33	4.58	2.82	4.60	3.66
RG	4.54	3.12	3.55	2.75	5.25	3.19
NPG	4.77	2.63	6.09	1.75	3.82	2.75
MGG	1.43	1.36	1.94	1.29	1.06	1.29
TVS	4.22	2.81	5.60	2.43	3.22	2.64
RS	4.05	2.55	4.45	2.78	3.76	2.64
NPS	5.84	3.94	8.05	3.14	4.25	3.69
MGS	.07	.24	.08	.26	.07	.23
DI	4.50	3.24	5.72	3.23	3.60	2.96
PAI	11.74	2.15	13.13	1.94	10.71	1.68

NOTE: Item identifications are: FE- father's educational attainment; ED- respondent's own educational attainment; IN- monthly income of respondent's family; PA- social participation (measured as number of organizations respondent belongs to); RG- time spent on a normal day listening to radio; TVG- time spent on a normal day watching TV; NPG- number of days per week on which newspaper is read; MGG- total number of magazines read regularly; TVS- frequency of watching news and programs about government and political matters on TV; RS- frequency of listening to news and discussions of public events, politics or government on radio; NPS- frequency of reading stories on politics or government problems, economics or other countries in a newspaper; MGS- number of public affairs magazines read regularly; DI- frequency of political discussions with family, co-workers and friends; PAI- public affairs information.

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